

Serial No. 09/847,658

REMARKS

In the above-identified office action, the Examiner has objected to the drawings because reference character 4a has been used to designate two different items. Applicants hereby have amended the specification so that 4a now only refers to the last lens. Applicants also enclose a proposed drawing correction deleting one of the 4a's in connection with Figures 1. Approval of this proposed correction is requested.

Claims 1-3 and 35 have been objected to because of certain informalities. In addition, Applicants have noticed other informalities and has corrected such. As amended, Applicants believe the claims are now unobjectionable.

Claim 25 has been rejected under 35 U.S.C. § 112 for prior mention of the sixth optical group. Applicants have amended claim 25 so that it now recites a 6th optical group, which is considered acceptable under 35 U.S.C. § 112.

Claims 1, 5, 19, 22, 28 and 37 have been rejected as being anticipated by the patent to Suzuki et al. Applicants have amended claim 1 that now contains the limitations of claim 4, previously indicated as allowable. Applicant has also amended claims 2 and 3 in the same manner. Claim 5 has been combined with the limitations of claim 6 previously indicated as allowable in combination with claims 1, 2 and 3 and as such believes these new claims to be allowable. Claim 22 is dependant upon claim 19. Claim 19 has been amended so that it now recites that the manipulation chamber is formed between adjacent plane-parallel optical elements. This is not shown in Suzuki who forms his manipulation chamber between nonadjacent lens optical elements and not between adjacent plain parallel optical elements. Thus, claim 19 should be allowable over Suzuki et al. as well as its dependent claim 22.

Claims 28 has been made dependent upon claim 1 and accordingly claim 1 is considered allowable. Claim 28 is also.

Claims 2, 20, 23 and 38 have been rejected as unpatentable over Suzuki et al and further in view of Taniguchi. Claim 2 has been amended so that it now has the limitations of claim 4 within. Claim 4 is being considered allowable of claim 2, claim 2 is also considered allowable.

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Claim 20 has been amended so that it now recites that the refractive index is varied in the manipulation chamber by changes in gas composition. It is generally stated that Taniguchi teaches the composition the gas in a sealed chamber within a projection optical system can be changed in order to correct the distortion of a projected image. However, Taniguchi does not suggest varying the refractive index by changing the gas composition. Taniguchi merely states that a gas chamber may be used. As such, Applicants believe that claim 20 now recites over the cited art. Claim 38 has been amended so that it now recites that the gas chamber is between adjacent plane-parallel optical elements. As stated above, this is believed to recite over Suzuki and accordingly, claim 38 should be allowable as well.

Claims 3, 21, 24 and 39 have been rejected as obvious over Suzuki et al and in further over Taniguchi. Claim 3 has been amended to include the restrictions of claim 4, previously indicated as allowable and accordingly, claim 3 is now considered allowable. Claim 21 has been amended to reflect that the gas chamber is formed between approximately plane-parallel optical elements and the refractive indexes changed is varied through pressure changes and changes in gas composition. This is considered to recite over the disclosures of Suzuki et al and Taniguchi and accordingly claim 21 is now considered allowable. Claim 24 is dependent upon claim 21 and accordingly claim 24 is considered allowable. Claim 39 has also been amended so that the gas chamber is constructed between adjacent approximately plain parallel optical elements to form a manipulation chamber, thereby reciting over Suzuki et al., and thus, allowable.

Claims 29, 30 and 33 have been rejected as obvious over Suzuki et al. and further in view of Ohno. Claim 29 has been amended so that it now incorporates the restrictions of claim 33. The Examiner stated that Ohno teaches that it is desirable to have a gas source connected to a sealed, plane-parallel gas chamber for the purpose of regulating air pressure within the chamber and has concluded that it would have been obvious for the manipulation chamber of Suzuki to be connected to a gas source since Ohno teaches it is desirable to have a gas source connected to a sealed plane-parallel gas chamber for the purpose of regulating air pressure within the chamber. However, Ohno does not teach one to manipulate the refractive index through pressure chambers or changes in gas composition. Accordingly, Ohno does not teach such manipulation for such

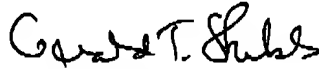
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purpose, and Claim 29 is considered patentable as amended over the combination of Suzuki and Ohno.

Applicants hereby request reconsideration and reexamination thereof.

With the above amendments, the Applicants consider the subject application to be ready for allowance, and Applicants earnestly solicit an early notice of same. If the Examiner is of the opinion that a telephone conference would expedite prosecution of the subject application, he is respectfully requested to call the undersigned attorney at the telephone number listed below.

Respectfully submitted,



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Dated: June 10, 2003

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